

New Actor Description

Market Enrollment

(OLD) The collection of enrollment or tariff data for a Demand Resource Object to provide a specific market product or service.

(NEW) An application for collecting enrollment or tariff data for Demand Resources that provides a specific market product or service.

CSWG Comments on Market Ops Actor

Market Operations is a rule setting organization, like an RTO, and these are business applications of the ISOs/RTOs. We will include these functions/applications in our layers. We will need to define what a function / application layer is for our updates to the NISTIR 7628 so that we have the logical layering with a specific actor.

Market Ops

(OLD) Manages and oversees wholesale power generation (and curtailment) contract execution. One of their primary functions is to deter market power abuses and anticompetitive behavior by ensuring transparency with respect to bilateral contracts. Functions include financial and goods sold clearing, price quotation streams, audit and balancing.

(NEW) Applications that manage wholesale power generation contracts to support financial and goods sold, clearing, price quotation streams, audit and balancing while guarding against anti-competitive behavior and other potential market abuses.

Network Operations

(OLD) The Network Operation domain is a sub-domain within Operation providing the monitoring, control, and maintenance of the utilities network. Key applications include monitoring and control remote field equipment (eg: Phase Measurement Units (PMU), capacitor banks, sectionalizers)

(NEW) A suite of applications that monitor, control and support maintenance of utility power system assets based on remote telemetry and system models.

Operational Planning

(OLD) Operational Planning and Optimization **actors** perform simulation of network operations, schedule switching actions, dispatch repair crews, inform affected customers, and schedule the importing of power. They keep the cost of imported power low through peak generation, switching, load shedding or demand response.

(NEW) Operational Planning and Optimization **applications** perform simulation of network operations, schedule switching actions, dispatch repair crews, inform affected customers, and schedule the importing of power. They keep the cost of imported power low through peak generation, switching, load shedding or demand response.

CSWG Comments on Retailing Actor

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(NOTE: SAME comment as Market Ops)

Retailing

(OLD) Retailers sale power to end customers and may in the future aggregate or broker between customers or into the market. Most are connected to a trading organization to allow participation in the wholesale market.

(NEW) Retailing applications that support the sale of power to end customers and in the future may support the aggregation or broker between customers or into the market.

CSWG Comments on Trading

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(NOTE: SAME comment as Market Ops)

Trading

(OLD) Traders are participants in markets, which include aggregators for provision and consumption and curtailment, and other qualified entities. There are a number of companies whose primary business is the buying and selling of energy.

(NEW) Applications that support trading participants in the market, which include aggregators for provision and consumption and curtailment, and other qualified entities. There are a number of companies whose primary business is the buying and selling of energy.

CSWG Comments on Transmission Asset Management

put all types of asset management into one actor and reference that it would be cross domain depending upon the organization

Transmission Asset Management

(OLD) Performed by actors that determine when equipment needs maintenance, calculate the life expectancy of the device, its operation history and maintenance for operational and engineering decisions.

(NEW) An application to determine when equipment needs maintenance, calculate the life expectancy of the device, its operation history and maintenance for operational and engineering decisions.

CSWG Comments on Wholesaling

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Wholesaling

(OLD) Wholesale sellers are any power generation company, power marketer, municipally owned utility, electric cooperative, river authority, or other entity that sells power at wholesale price vs retail rates allowed for small Distributed Generation and Stored Energy assets (retail customer's Photovoltaic(PV) arrays, Plug-in Electric Vehicles (PEV), micro-hydro, etc). Determination between wholesale and retail is determined by each State's regulator.

(NEW) Applications that support wholesale sellers as defined as any power generation company, power marketer, municipally owned utility, electric cooperative, river authority, or other entity that sells power at wholesale price vs retail rates allowed for small Distributed Generation and Stored Energy assets (retail customer's Photovoltaic(PV) arrays, Plug-in Electric Vehicles (PEV), micro-hydro, etc). Determination between wholesale and retail is determined by each State's regulator.

Customer-side Energy Gateway

The Customer-side Energy Gateway (CsEG) is an optional communications device used to send / receive messages to / from devices on the customer premise.

Load Control Device

A Load Control Device (LCD) balances load by controlling Customer appliances and equipment (DR, DER, EV and ES charging / discharging). To do this, LCD processes load management program contracts, relevant historic information, profiles, behavioral models, and customer-specific power quality and reliability characteristics.

Meter Reading and Control

A Meter Reading and Control (MRC) performs a variety of functions on the metering system including data collection, disconnect / reconnect, outage management, prepayment point of sale, power quality and reliability monitoring, meter maintenance and asset management, meter data management including validation, estimation and editing (VEE), customer billing, and load management, including load analysis and control, demand response, and risk management.

Smart Meter

- A smart meter is an advanced electric revenue meter capable of two-way communications with the utility. It serves as a gateway between the utility, customer site, and customer's HAN devices and / or load controllers. It measures, records, displays, and transmits data such as energy usage, generation, text messages, and event logs to authorized systems. It may optionally include a disconnect switch that can be used to remotely provide or disconnect service.
- Smart meters are deployed on devices located in the field (e.g., on the side of a customer's home), and, as such, have limited physical protection.

